**1) Content Knowledge:**

Content Knowledge is the complete understanding of the material to be taught/delivered. This is an important component of any lesson plan because if an instructor is not clear on what they need to teach…they are not going to be effective teachers to their students.

**2) Pedagogical Knowledge**

This involves all the components of teaching and learning including how students learn, how to manage students how to create lesson plans and how to assess students. Each component explains clearly their particular importance. For example: how do students learn? What are the different types of learners, i.e.: visual, oratory etc. If a teacher does not possess management skills, the learning environment is not conducive for learning to take place. Knowing the different "parts" of lesson plans is also important. We must have goals and objectives along with the procedure of the lesson to name a few. Assessment of the student's intake of the lesson is also important since it gives us suggestions as to how to make changes in our lessons so that students can benefit from them.

**3) Technological Knowledge**

This involves knowledge about basic technological aides such as text books, the blackboard to more sophisticated tools such as digital components and podcasts.

**4) TPK Technological Content Knowledge**

TPK is the clear understanding of technological tools and how to incorporate these in teaching. This paves the way on changing how teachers teach. How do tools work, what can they do to enhance teaching and learning? Being able to answer these two questions gives teachers a clearer understanding of each tool and allows for better choices when selecting tools.

**5) TCK technological Content Knowledge**

The understanding on how technological tools can bring forth innovative changes in content of teaching materials. How do these tools improve/enhance the content that needs to be taught? Understanding how technology interacts with content is vital to effective lesson planning.

**6) Design Experiments**

These experiments encompasses the implementation and studies of strategies involved in teaching content that addresses the many different classrooms, population and school settings. These assist in bridging research and actual implementation between theories and applications.For example: does RTI really work? Through a design experiment that carefully outlines each tier, practices and outcomes a school district can gage the affect of RTI and their at risk population.

**7) Conceptual Framework**

Conceptual frameworks allow for the actual formulas or recipes that show the guidelines for an idea or thought such as the TCPK method. It shows how it is actually done. Again, the tiers in an RTI program aligns all the necessary information for each tier tying them together to show the end result of this program: the conceptual framework.

**8) Transparent Technologies**

These are tools that commonplace in the classroom such as overhead projectors and television sets used to show videos. These tools are transparent because they have been around for so long that as my first statement said they are commonplace.

**9) Descriptive Contribution of TPCK**

This contribution of TPCK allows for a manner in which all involved can discuss TPCK. By understanding how this works, conversations can take place to discuss such areas as improvement, the understanding of components involved and most importantly, it allows for the understanding of the interlace between teaching and technology so that those teaching can clearly make sense of it. At first, this was only a theory (TPCK) and now because this has been used by large teaching populations and many such programs have been established, there is a "visual" framework for the blending of technology and content. Because of this, terms exist that explain each component and this facilitates communication giving it a dimension of concreteness rather than its existing as a mere theory.

**10) Inferential Contribution of TPCK**

This component of TPCK allows for predictions on what is successful on specific situations and why they are successful. Much like other entities like RTI ot Title One programs, the existence of TPCK has allowed for statistics and written monitoring of such programs so that experts can actually predict how successful it is and when it is most likely to be successful.

**11) Application Contribution of TPCK**

The application contributions of TPCK are first, it creates a bridge between the actual description of the program and its design and also it also allows for the possibility to create more successful learning atmospheres. Instead of simply teaching a student how to create a digital story technically how to navigate through the program being used, blending this knowledge along with the particular subject area such as writing is the applied contribution of TPCK.

**12) Digital Technological Tools**

These are tools that include computers, the Internet, digital cameras, PowerPoint Presentations and podcasts which are used as aides to immerse technology into daily teaching and learning.For example using a PowerPoint and embedding voice and sound can add a creative component to a report on the Amazon Forest.

**13) International Society for Technology in Education**

Commonly referred to NETS.S, the ISTE provides benchmark standards for students and teachers. For example: Standard 1 addresses Creativity and Innovation and one of its sub-category is "apply existing knowledge to generate new ideas, products or processes."

**14) TPACK Analysis and Lesson Planning**

This is a section that is used in lesson planning that cite such components as content, pedagogy, technology, content knowledge, pedagogy knowledge and technology knowledge.

**15) TPACK Complex Interplay between PCK, TCK, TPK and TPACK**

How technology is integrated into an activity and what it replaces. For example, instead of using paper and pencil to write a story, students will utilize digital tools to create a digital story line.